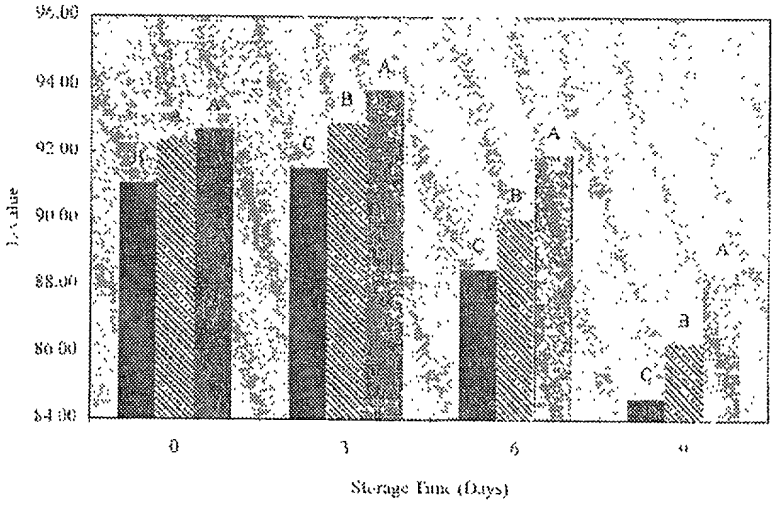


Fig. 1

■ 1. Sodium bicarbonate @ pH 11.0, 120s; 0.8% Fe + 3.2% NaP, 60s

■ 2. Sodium bicarbonate @ pH 11.0, 120s; 0.8% Fe + 3.2% NaP + 1000 ppm EDTA, 60s

■ 3. Sodium bicarbonate @ pH 11.0, 120s; 0.8% Fe + 3.2% NaP + 1000 ppm HEDTA + 1000 ppm CaCl2, 60s

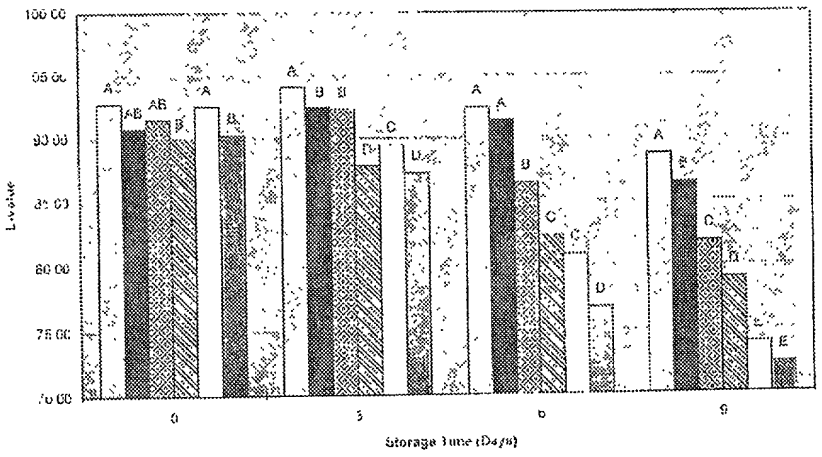

100.00
95.00
90.00
85.00
80.00
75.00
70.00
Level
0
3
6
9
Storage Time (Days)

Fig. 2

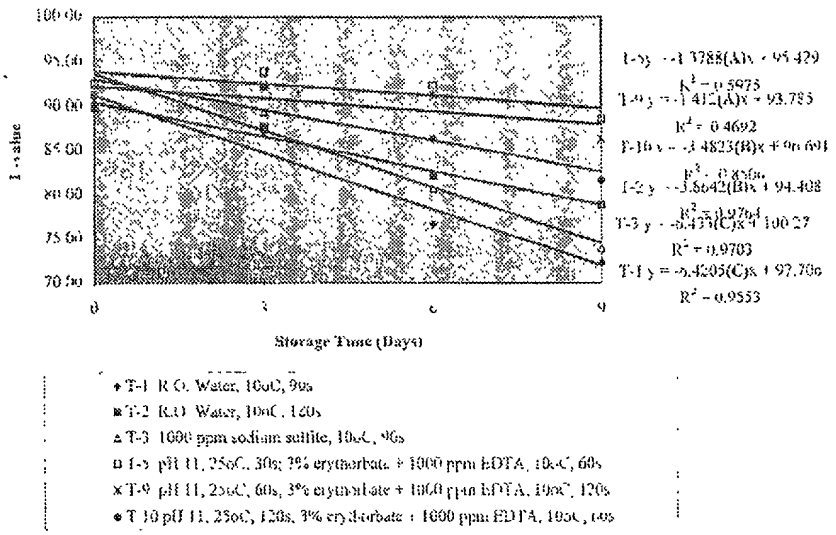

100.00
95.00
90.00
85.00
80.00
75.00
70.00
0
3
6
9
T-1 y = -1.3788(A)x + 95.429
R² = 0.5975
T-2 y = -1.412(A)x + 93.785
R² = 0.4692
T-10 y = -3.4823(B)x + 96.691
R² = 0.8956
T-2 y = -3.8642(B)x + 94.408
R² = 0.9704
T-3 y = -0.435(C)x + 100.27
R² = 0.9703
T-1 y = -0.4205(C)x + 97.706
R² = 0.9553
Storage Time (Days)
◆ T-1 R.O. Water, 10oC, 9os
■ T-2 R.O. Water, 10oC, 12os
▲ T-3 1000 ppm sodium sulfite, 10oC, 9os
□ T-5 pH 11, 25oC, 30s; 3% erythorbate + 1000 ppm EDTA, 10oC, 60s
× T-9 pH 11, 25oC, 60s, 3% erythorbate + 1000 ppm EDTA, 10oC, 120s
● T-10 pH 11, 25oC, 120s, 3% erythorbate + 1000 ppm EDTA, 10oC, 60s

Fig. 3

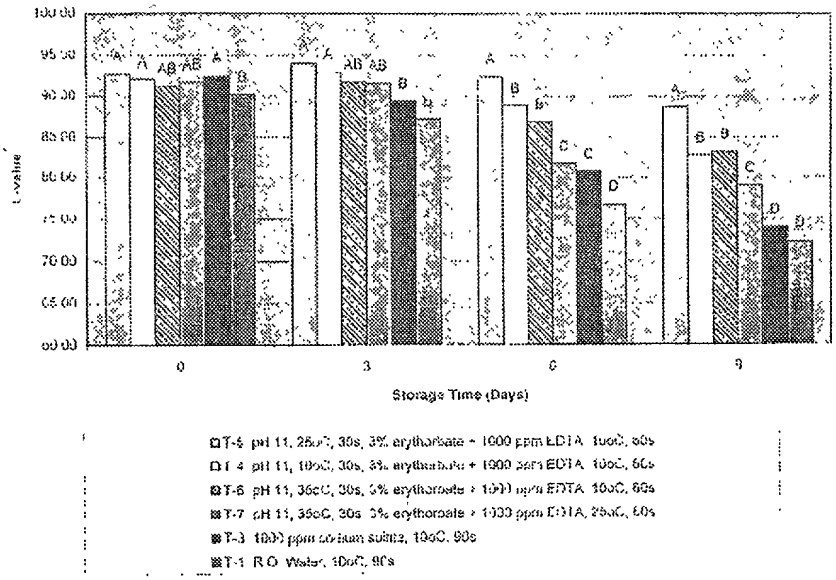

L-value
Storage Time (Days)
0
3
6
9
T-6 pH 11, 25oC, 30s, 3% erythorbate + 1000 ppm EDTA 10oC, 60s
T-4 pH 11, 10oC, 30s, 3% erythorbate + 1000 ppm EDTA 10oC, 60s
T-5 pH 11, 35oC, 30s, 3% erythorbate + 1000 ppm EDTA 10oC, 60s
T-7 pH 11, 35oC, 30s, 3% erythorbate + 1000 ppm EDTA, 25oC, 60s
T-3 1000 ppm sodium sulfite, 10oC, 90s
T-1 R.O. Water, 10oC, 90s

Fig. 4

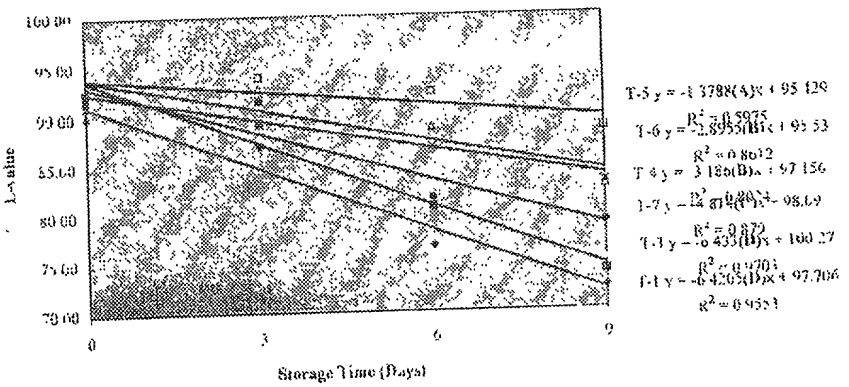

100.00
95.00
90.00
85.00
80.00
75.00
70.00
L-value
0
3
6
9
Storage Time (Days)
T-5 y = -1.3788(A)x + 95.129
T-6 y = -2.8955(B)x + 95.53
R² = 0.8612
T-4 y = -3.186(B)x + 97.156
T-7 y = -1.4781(B)x + 98.69
R² = 0.872
T-1 y = -0.435(D)x + 100.27
R² = 0.9703
T-2 y = -0.4205(D)x + 97.706
R² = 0.9553
◆ T-1 D.I. Water, 10oC, 90s
■ T-3 1000 ppm sodium sulfite, 10oC, 90s
▲ T-4 pH 11, 10oC, 30s, 3% erythorbate + 1000 ppm EDTA, 10oC, 60s
□ T-5 pH 11, 25oC, 30s, 3% erythorbate + 1000 ppm EDTA, 10oC, 60s
× T-6 pH 11, 35oC, 30s; 3% erythorbate + 1000 ppm EDTA, 10oC, 60s
✱ T-7 pH 11, 35oC, 30s; 3% erythorbate + 1000 ppm EDTA, 25oC, 60s

Fig. 5

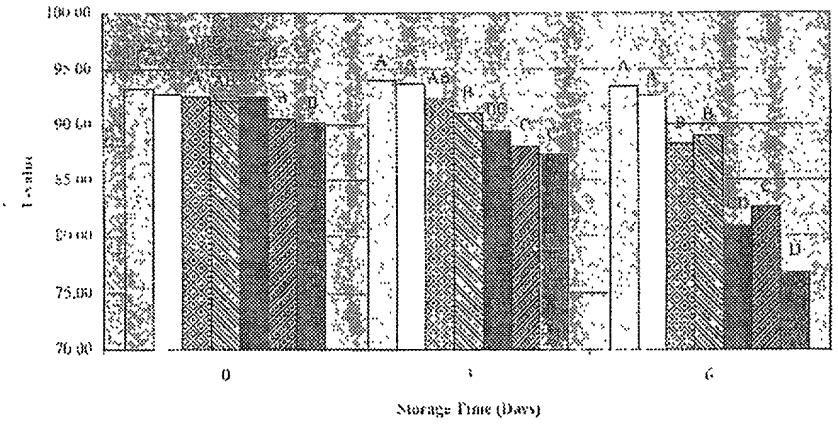
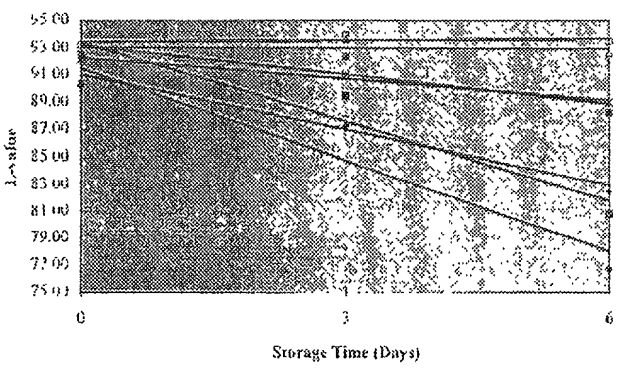


Fig. 6



T-4 y = 0.1012(A)x + 93.349
R^2 = 0.6749
T-3 y = -0.088(A)x + 93.139
R^2 = 0.0877
T-5 y = -1.5803(B)x + 93.883
R^2 = 0.969
T-6 y = -2.1025(B)x + 95.356
R^2 = 0.7825
T-7 y = -4.0578(C)x + 95.103
R^2 = 0.9566
T-8 y = -5.8413(C)x + 99.285
R^2 = 0.9295
T-1 y = -6.7387(D)x + 98.237
R^2 = 0.9071

◆ T-1 R.O. Water, 9.5
■ T-2 Distilled water, 9.5
△ T-3 0.05 M sodium bicarbonate @ pH 11.0, 3% erythorbate
○ T-4 0.05 M sodium bicarbonate @ pH 10.5, 3% erythorbate
✕ T-5 0.05 M sodium bicarbonate @ pH 10.0, 3% erythorbate
✱ T-6 0.05 M sodium bicarbonate @ pH 9.5, 3% erythorbate
+ T-7 0.05 M sodium bicarbonate @ pH 9.0, 3% erythorbate

Fig. 7

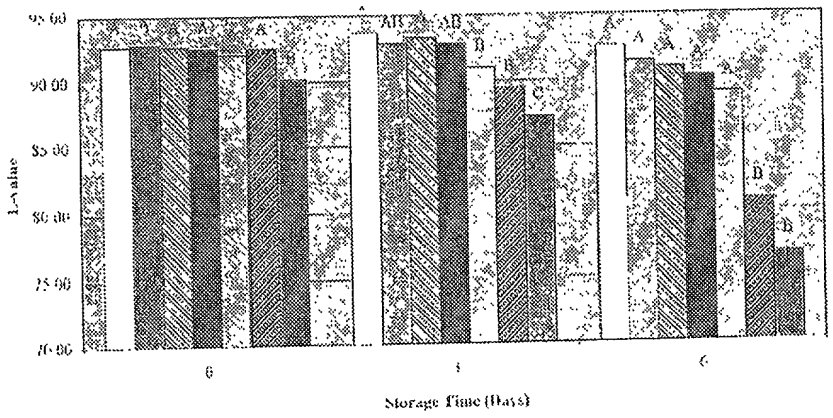
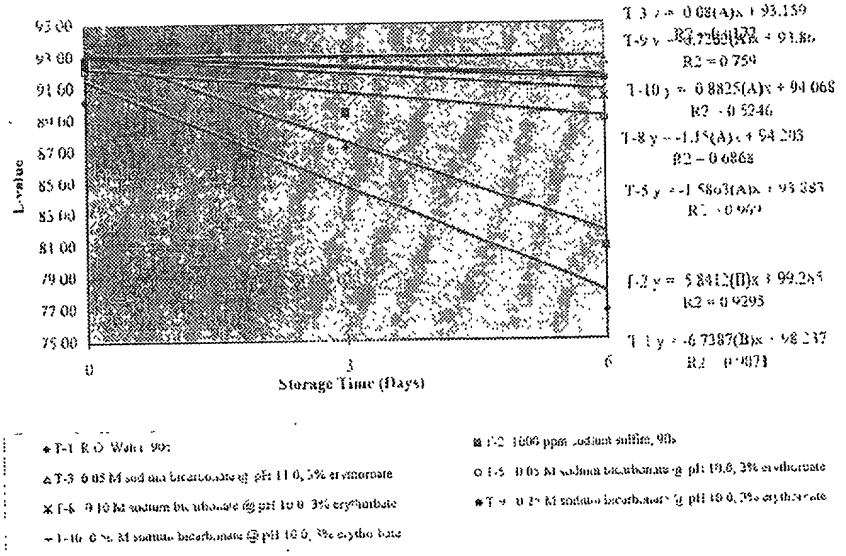


FIG. 8



◆ T-1 R.O. Water 99%

△ T-3 0.05 M sodium bicarbonate @ pH 11.0, 3% erythorbate

✕ T-6 0.10 M sodium bicarbonate @ pH 10.0 3% erythorbate

– T-10 0.2 M sodium bicarbonate @ pH 10.0, 3% erythorbate

■ T-2 1000 ppm sodium sulfite, 98%

○ T-5 0.05 M sodium bicarbonate @ pH 10.0, 3% erythorbate

✱ T-8 0.1 M sodium bicarbonate @ pH 10.0, 3% erythorbate

Fig. 9

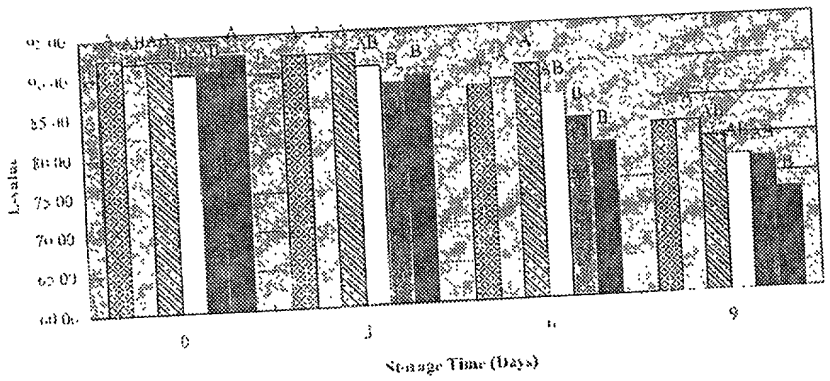
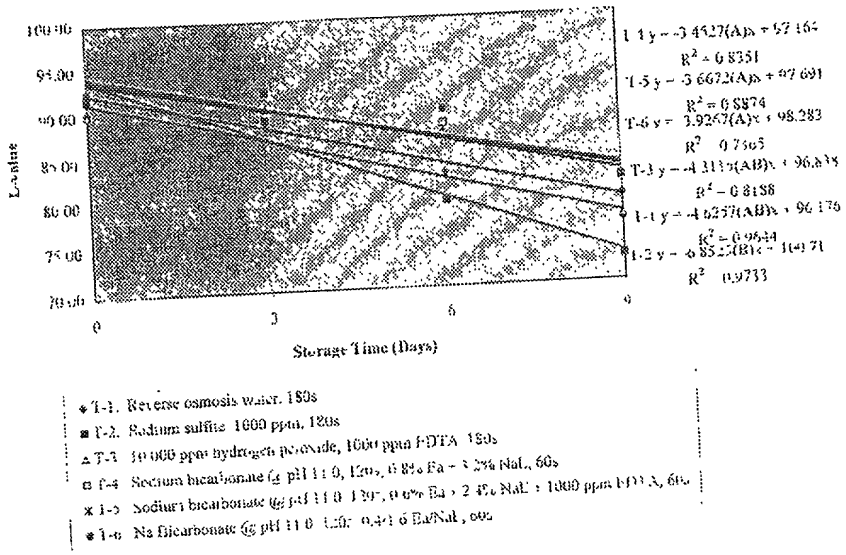


Fig. 10



- ◆ T-1: Reverse osmosis water, 180s
- ■ T-2: Sodium sulfite 1000 ppm, 120s
- ▲ T-3: 10 000 ppm hydrogen peroxide, 1000 ppm EDTA 180s
- ⊟ T-4: Sodium bicarbonate (@ pH 11.0, 120s, 0.8% Fe + 3.2% NaL, 60s
- ✱ T-5: Sodium bicarbonate (@ pH 11.0 120s, 0.6% Fe + 2.4% NaL + 1000 ppm EDTA, 60s
- ● T-6: Na bicarbonate (@ pH 11.0 120s 0.4% Fe/NaL, 60s

Fig. 11

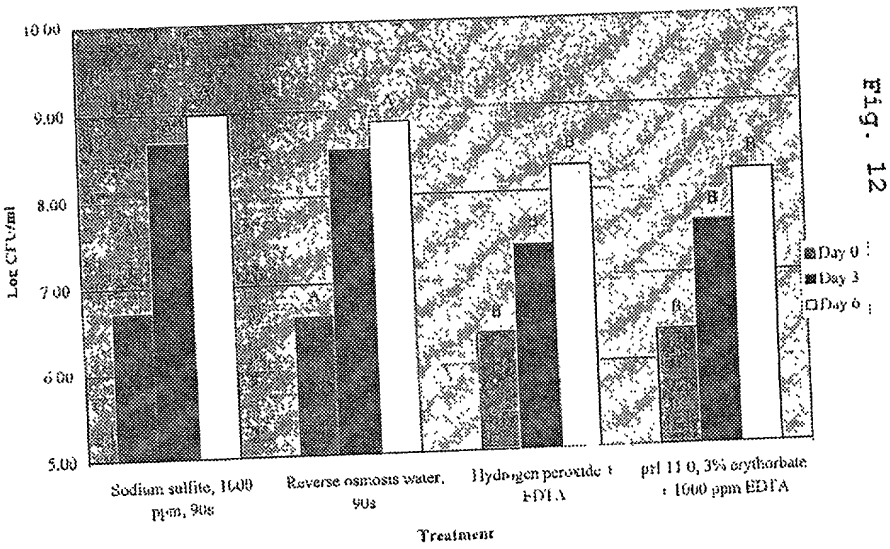

10.00
9.00
8.00
7.00
6.00
5.00
Log CFU/ml
Day 0
Day 3
Day 6
Sodium sulfite, 1000 ppm, 90s
Reverse osmosis water, 90s
Hydrogen peroxide + EDTA
pH 11.0, 3% erythorbate + 1000 ppm EDTA
Treatment

Fig. 12

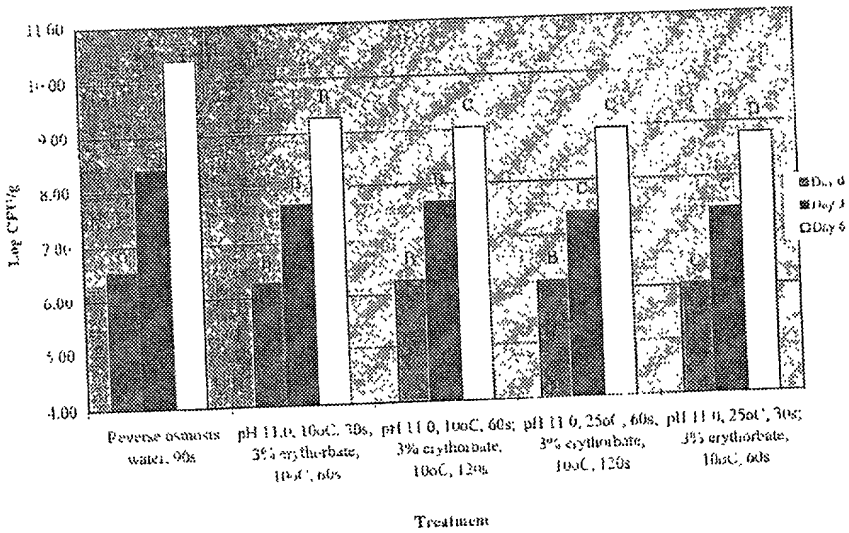

11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
Log CFU/g
A
B
C
D
Reverse osmosis water, 90s
pH 11.0, 10oC, 30s, 3% erythorbate, 10oC, 60s
pH 11.0, 10oC, 60s; 3% erythorbate, 10oC, 120s
pH 11.0, 25oC, 60s, 3% erythorbate, 10oC, 120s
pH 11.0, 25oC, 30s; 3% erythorbate, 10oC, 60s
Treatment

Fig. 13

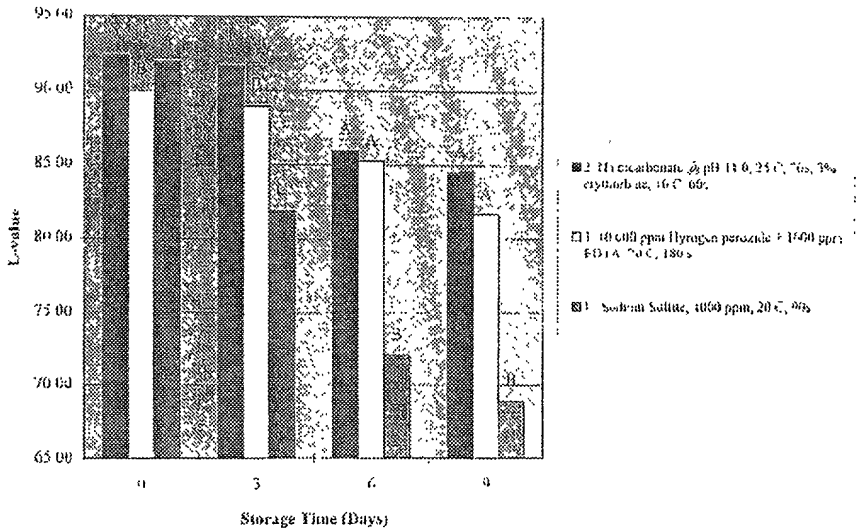

95.00
90.00
85.00
80.00
75.00
70.00
65.00
L-value
0
3
6
9
Storage Time (Days)

Fig. 14

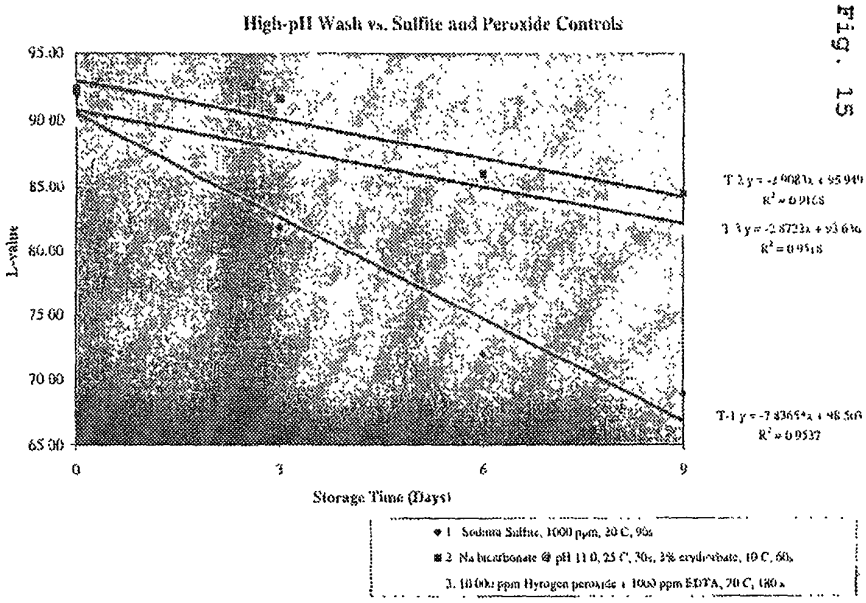


Fig. 15

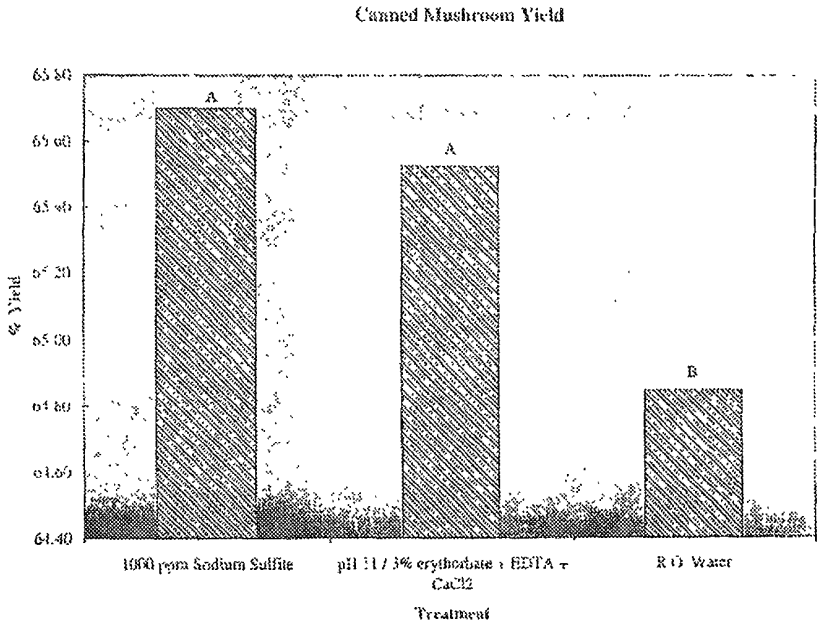

Canned Mushroom Yield
65.80
65.60
65.40
65.20
65.00
64.80
64.60
64.40
% Yield
A
A
B
1000 ppm Sodium Sulfite
pH 11 / 3% erythorbate + EDTA + CaCl2
R O Water
Treatment

Fig. 17

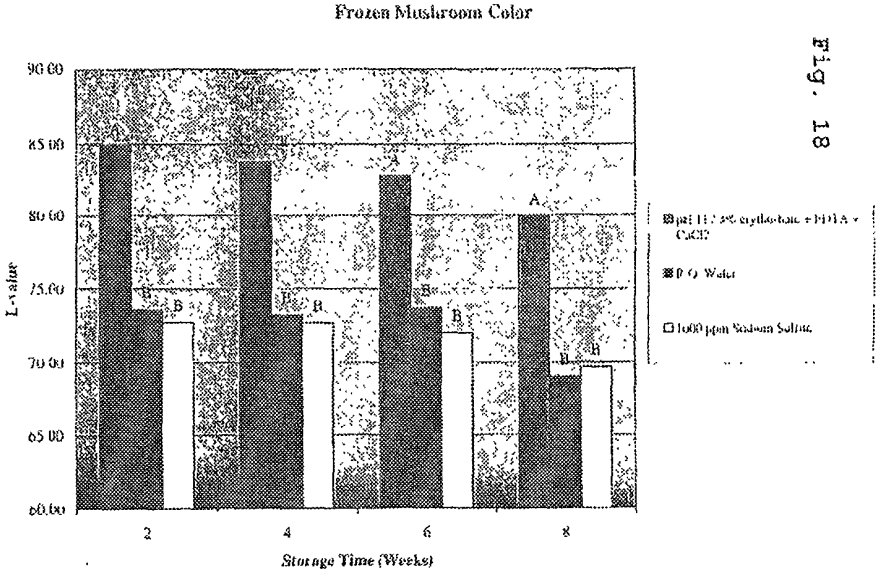

Frozen Mushroom Color
90.00
85.00
80.00
75.00
70.00
65.00
60.00
L-value
A
B
2
4
6
8
Storage Time (Weeks)
DI Water
1000 ppm Sodium Sulfite

Fig. 18

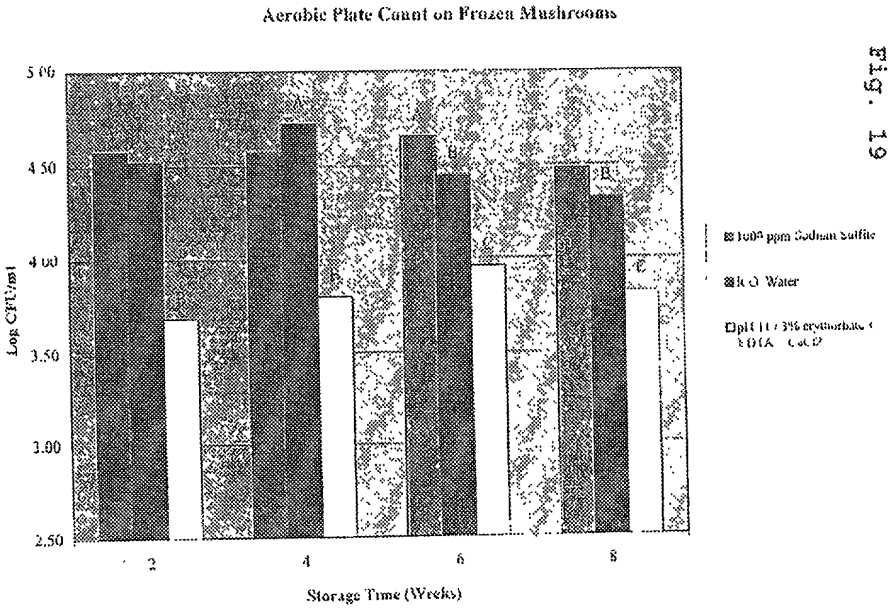

Aerobic Plate Count on Frozen Mushrooms
Log CFU/ml
5.00
4.50
4.00
3.50
3.00
2.50
2
4
6
8
Storage Time (Weeks)
A
B
C
D
E
1000 ppm Sodium Sulfite
H2O Water

Fig. 19

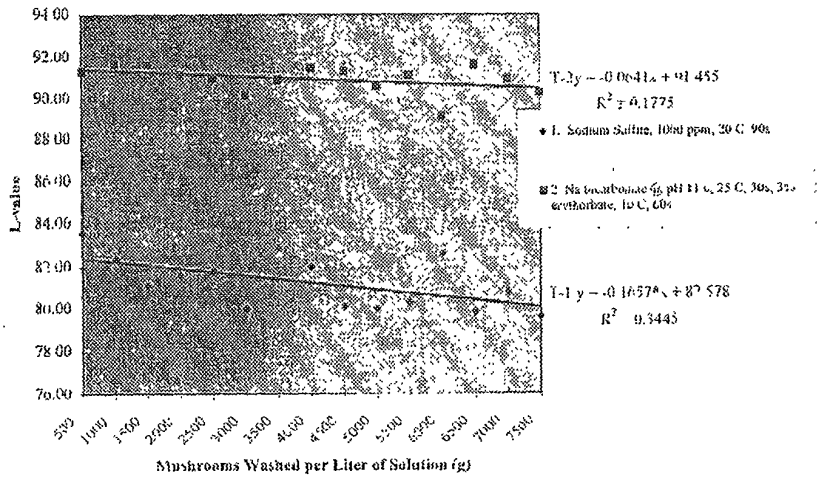

94.00
92.00
90.00
88.00
86.00
84.00
82.00
80.00
78.00
76.00
L-value
T-2 y = -0.0641x + 91.455
R² = 0.1775
♦ 1. Sodium Sulfite, 1000 ppm, 20 C, 90s
■ 2. Na bicarbonate @ pH 11 c, 25 C, 30s, 3%
erythorbate, 10 C, 60s
T-1 y = -0.1657x + 87.578
R² = 0.3445
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
Mushrooms Washed per Liter of Solution (g)

Fig. 20